

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Original): A method for identifying an analyte which directly or indirectly modulates activity of a glucocorticoid receptor in the brain of an animal, which comprises:

- (a) administering a glucocorticoid to a first animal and measuring an amount of tryptophan hydroxylase (TPH2) in the brain of the first animal; and
- (b) administering the glucocorticoid and the analyte to a second animal and measuring the amount of the TPH2 in the brain of the second animal wherein a change in the amount of the TPH2 in the brain of the second animal relative to the amount of the TPH2 in the first animal indicates that the analyte modulates the activity of the glucocorticoid receptor in the brain of the animal.

Claim 2 (Original): The method of Claim 1 wherein the TPH2 is TPH2 mRNA and the TPH2 mRNA is measured by reverse transcription-polymerase chain reaction (RT-PCR).

Claim 3 (Original): The method of Claim 2 wherein the RT-PCR is a real-time RT-PCR which uses an oligonucleotide probe comprising a nucleotide sequence complementary to a nucleotide sequence comprising the TPH2 mRNA.

Claim 4 (Original): The method of Claim 1 wherein the TPH2 is TPH2 RNA and the TPH2 mRNA is measured by in situ hybridization which uses an oligonucleotide probe comprising a nucleotide sequence complementary to a nucleotide sequence comprising the TPH2 mRNA.

Claims 5-8 (Cancelled)

Claim 9 (Original): A method for determining whether an analyte directly or indirectly affects the amount of tryptophan hydroxylase isoform 2 (TPH2) in the brain of an animal which has chronically elevated glucocorticoid levels, which comprises:

- (a) providing an animal which has the chronically elevated glucocorticoid levels;
- (b) administering the analyte to the animal which has the chronically elevated glucocorticoid levels; and

(c) measuring the amount of the TPH2 in the brain of the animal wherein an increase in the amount of the TPH2 in the brain of the animal compared to the amount of the TPH2 in the brain of the animal without the analyte indicates that the analyte has an effect on the amount of the TPH2 in the animal which has the chronically elevated glucocorticoid levels.

Claim 10 (Original): The method of Claim 9 wherein the TPH2 is TPH2 mRNA and the TPH2 mRNA is measured by reverse transcription-polymerase chain reaction (RT-PCR).

Claim 11 (Original): The method of Claim 10 wherein the RT-PCR is a real-time RT-PCR which uses an oligonucleotide probe comprising a nucleotide sequence complementary to a nucleotide sequence comprising the TPH2 mRNA.

Claim 12 (Original): The method of Claim 9 wherein the TPH2 is TPH2 RNA and the TPH2 mRNA is measured by in situ hybridization which uses an oligonucleotide probe comprising a nucleotide sequence complementary to a nucleotide sequence comprising the TPH2 mRNA.

Claims 13-16 (Cancelled)

Claim 17 (Original): A method for determining whether an analyte is a full glucocorticoid agonist or antagonist or partial glucocorticoid agonist in the brain of an animal, which comprises:

- (a) administering the analyte to a first animal and measuring an amount of tryptophan hydroxylase isoform 2 (TPH2) in the brain of the first animal;
- (b) administering a glucocorticoid to a second animal and measuring an amount of the TPH2 in the brain of the second animal;
- (c) administering the glucocorticoid and the analyte to a third animal and measuring an amount of the TPH2 in the brain of the third animal; and
- (d) comparing the amount of the TPH2 in the brains of the first, second, and third animals wherein (1) a decrease in the TPH2 in the brain of the first animal and a decrease in the TPH2 in the brain of the second animal which is not greater than the decrease in the TPH2 in the brain of the third animal indicates that the analyte is a full agonist, (2) an increase in TPH2 in the brain of the first animal and an increase in the TPH2 in the brain of the third animal compared to the TPH2 in the brain of the second animal indicates that the analyte is a full antagonist, and (3) a decrease in the TPH2 in the brain of the first animal and a decrease in the TPH2 in the brain of the second animal which is greater than the decrease in the TPH2 in the brain of the third animal indicates that the analyte is a partial agonist.

Claim 18 (Original): The method of Claim 17 wherein the TPH2 is TPH2 mRNA and the TPH2 mRNA is measured by reverse transcription-polymerase chain reaction (RT-PCR).

Claim 19 (Original): The method of Claim 18 wherein the RT-PCR is a real-time RT-PCR which uses an oligonucleotide probe comprising a nucleotide sequence complementary to a nucleotide sequence comprising the TPH2 mRNA.

Claim 20 (Original): The method of Claim 17 wherein the TPH2 is TPH2 RNA and the TPH2 mRNA is measured by in situ hybridization which uses an oligonucleotide probe comprising a nucleotide sequence complementary to a nucleotide sequence comprising the TPH2 mRNA.

Claims 21-28 (Cancelled)